

Missouri Department of Natural Resources



PUBLIC NOTICE

DRAFT MISSOURI STATE OPERATING PERMIT

DATE: August 13, 2004

In accordance with the state Clean Water Law, Chapter 644, RSMo, Clean Water Commission regulation 10 CSR 20-6.010, and the federal Clean Water Act, the applicants listed herein have applied for authorization to either discharge to waters of the state or to operate a no-discharge wastewater treatment facility. The proposed permits for these operations are consistent with applicable water quality standards, effluent standards and/or treatment requirements or suitable timetables to meet these requirements (see 10 CSR 20-7.015 and 7.031). All permits will be issued for a period of five years, unless noted otherwise in the Public Notice for that discharge.

On the basis of preliminary staff review and the application of applicable standards and regulations, the Missouri Department of Natural Resources (MDNR), as administrative agent for the Missouri Clean Water Commission, proposes to issue a permit(s) subject to certain effluent limitations, schedules, and special conditions. The proposed determinations are tentative pending public comment.

Persons wishing to comment on the proposed permit conditions are invited to submit them in writing to the Department of Natural Resources, St. Louis Regional Office, 7545 South Lindbergh, Suite 210, St. Louis, Missouri 63125, ATTN: Thomas M. Siegel, P.E., Chief, Permits and Engineering. Please include the permit number in all comment letters.

Comments should be confined to the issues relating to the proposed action and permit(s) and the effect on water quality. The MDNR may not consider as relevant comments or objections to a permit based on issues outside the authority of the Clean Water Commission, (see Curdt v. Mo. Clean Water Commission, 586 S.W.2d 58 Mo. App. 1979).

All comments must be postmarked by September 12, 2004 or received in our office by 5:00 p.m. on September 15, 2004. The requirement of a signed document makes it impossible to accept email comments for consideration at this time. Comments will be considered in the formulation of all final determinations regarding the applications. If response to this notice indicates significant public interest, a public meeting or hearing may be held after due notice for the purpose of receiving public comment on the proposed permit or determination. Public hearings and/or issuance of the permit will be conducted or processed according to 10 CSR 20-6.020.

Copies of all draft permits and other information including copies of applicable regulations are available for inspection and copying at DNR's website, <http://www.dnr.state.mo.us/wpscd/wpcp/homewpcp.htm>, or at the Department of Natural Resources, St. Louis Regional Office, 7545 S. Lindbergh, Suite 210, St. Louis, Missouri 63125, between the hours of 8:00 a.m. and 5:00 p.m., Monday through Friday.

Public Notice Date: August 13, 2004
Permit Number: MO-0130575
St. Louis Regional Office

FACILITY NAME AND ADDRESS	NAME AND ADDRESS OF OWNER
Crestview Mobile Court 143 McIntosh Foley, MO 63347	Robert Greber 143 McIntosh Foley, MO 63347
RECEIVING STREAM & LEGAL DESCRIPTION	TYPE OF DISCHARGE
Unnamed tributary to Barley Branch NE $\frac{1}{4}$, NW $\frac{1}{4}$, NW $\frac{1}{4}$, Sec. 35, T49N, R2E Lincoln County	Domestic (new)

STATE OF MISSOURI
DEPARTMENT OF NATURAL RESOURCES
MISSOURI CLEAN WATER COMMISSION



MISSOURI STATE OPERATING PERMIT

In compliance with the Missouri Clean Water Law, (Chapter 644 R.S. Mo. as amended, hereinafter, the Law), and the Federal Water Pollution Control Act (Public Law 92-500, 92nd Congress) as amended,

Permit No. MO-0130575

Owner: Robert Greber
Address: 143 McIntosh, Foley, MO 63347

Continuing Authority: Same as above
Address: Same as above

Facility Name: Crestview Mobile Court
Facility Address: 143 McIntosh, Foley, MO 63347

Legal Description: NW ¼, NW ¼, Sec. 35, T49N, R2E, Lincoln County
Latitude/Longitude: +39°02'50"N -090°45'02"

Receiving Stream: Unnamed tributary to Barley Branch (U)
First Classified Stream and ID: Sandy Creek (C) (ID #0029)
USGS Basin & Sub-watershed No.: (07110004-230004)

is authorized to discharge from the facility described herein, in accordance with the effluent limitations and monitoring requirements as set forth herein:

FACILITY DESCRIPTION

Outfall #001 - MHP - SIC # 4952
Extended aeration/sludge disposal by contract hauler.
Design population equivalent is 178.
Design flow is 18,000 gallons/day
Design sludge production is 3.0 dry tons/year.

This permit authorizes only wastewater discharges under the Missouri Clean Water Law and the National Pollutant Discharge Elimination System; it does not apply to other regulated areas. This permit may be appealed in accordance with Section 644.051.6 of the Law.

Effective Date

Stephen M. Mahfood, Director, Department of Natural Resources
Executive Secretary, Clean Water Commission

Expiration Date
MO 780-0041 (10-93)

Mohamad Alhalabi, P.E., Director, St. Louis Regional Office

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS					PAGE NUMBER 2 of 3	
					PERMIT NUMBER MO-0130575	
The permittee is authorized to discharge from outfall(s) with serial number(s) as specified in the application for this permit. The final effluent limitations shall become effective upon issuance and remain in effect until expiration of the permit. Such discharges shall be controlled, limited and monitored by the permittee as specified below:						
(OUTFALL NUMBER AND EFFLUENT PARAMETERS)	UNITS	FINAL EFFLUENT LIMITATIONS			MONITORING REQUIREMENTS	
		DAILY MAXIMUM	WEEKLY AVERAGE	MONTHLY AVERAGE	MEASUREMENT FREQUENCY	SAMPLE TYPE
<u>Outfall #001</u>						
Flow	MGD	*		*	Once/month	24-hr. estimate
Biochemical Oxygen Demand ₅	mg/L		45	30	Once/quarter**	Modified Comp.***
Total Suspended Solids	mg/L		45	30	Once/quarter**	Modified Comp.***
pH - Units	SU	****		****	Once/quarter**	Grab
MONITORING REPORTS SHALL BE SUBMITTED <u>QUARTERLY</u> ; THE FIRST REPORT IS DUE _____. THERE SHALL BE NO DISCHARGE OF FLOATING SOLIDS OR VISIBLE FOAM IN OTHER THAN TRACE AMOUNTS						
B. STANDARD CONDITIONS						
IN ADDITION TO SPECIFIED CONDITIONS STATED HEREIN, THIS PERMIT IS SUBJECT TO THE ATTACHED <u>Parts I & III</u> STANDARD CONDITIONS DATED <u>October 1, 1980 and August 15, 1994</u> , AND HEREBY INCORPORATED AS THOUGH FULLY SET FORTH HEREIN.						

MO 780-0010 (8/91)

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (Continued)

- * Monitoring requirement only.
- ** Sample once per quarter in the months of March, June, September, and December.
- *** A composite sample made up from a minimum of four grab samples collected within a 24-hour period with a minimum of two hours between each grab sample.
- **** pH is measured in pH units and is not to be averaged. The pH is limited to the range of 6.0 to 9.0 pH units

C. SPECIAL CONDITIONS

1. All outfalls must be clearly marked in the field.
2. Report as no-discharge when a discharge does not occur during the report period.
3. Permittee will cease discharge by connection to areawide wastewater treatment system within 90 days of notice of its availability
4. Sludge and Biosolids Use For Domestic Wastewater Treatment Facilities
 - (a) Permittee shall comply with the pollutant limitations, monitoring, reporting, and other requirements in accordance with the attached permit Standard Conditions.
 - (b) If sludge is not removed by a contract hauler, permittee is authorized to land apply biosolids. Permit Standard Conditions, Part III shall apply to the land application of biosolids. Permittee shall notify the department at least 180 days prior to the planned removal of biosolids. The department may require submittal of a biosolids management plan for department review and approval as determined appropriate on a case-by-case basis.

C. SPECIAL CONDITIONS (Continued)

5. General Criteria. The following water quality criteria shall be applicable to all waters of the state at all times including mixing zones. No water contaminant, by itself or in combination with other substances, shall prevent the waters of the state from meeting the following conditions:
- (a) Waters shall be free from substances in sufficient amounts to cause the formation of putrescent, unsightly or harmful bottom deposits or prevent full maintenance of beneficial uses;
 - (b) Waters shall be free from oil, scum and floating debris in sufficient amounts to be unsightly or prevent full maintenance of beneficial uses;
 - (c) Waters shall be free from substances in sufficient amounts to cause unsightly color or turbidity, offensive odor or prevent full maintenance of beneficial uses;
 - (d) Waters shall be free from substances or conditions in sufficient amounts to result in toxicity to human, animal or aquatic life;
 - (e) There shall be no significant human health hazard from incidental contact with the water;
 - (f) There shall be no acute toxicity to livestock or wildlife watering;
 - (g) Waters shall be free from physical, chemical or hydrologic changes that would impair the natural biological community;
 - (h) Waters shall be free from used tires, car bodies, appliances, demolition debris, used vehicles or equipment and solid waste as defined in Missouri's Solid Waste Law, section 260.200, RSMo, except as the use of such materials is specifically permitted pursuant to section 260.200-260.247.
6. Changes in Discharges of Toxic Substances. The permittee shall notify the Director as soon as it knows or has reason to believe:
- (a) That any activity has occurred or will occur which would result in the discharge of any toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels:"
 - (1) One hundred micrograms per liter (100 µg/L);
 - (2) Two hundred micrograms per liter (200 µg/L) for acrolein and acrylonitrile; five hundred micrograms per liter (500 µg/L) for 2,5 dinitrophenol and for 2-methyl-4, 6-dinitrophenol; and one milligram per liter (1 mg/L) for antimony;
 - (3) Five (5) times the maximum concentration value reported for the pollutant in the permit application;
 - (4) The level established in Part A of the permit by the Director.
 - (b) That they have begun or expect to begin to use or manufacture as an intermediate or final product or byproduct any toxic pollutant, which was not reported in the permit application.
7. This permit may be reopened and modified, or alternatively revoked and reissued, to:
- (a) Comply with any applicable effluent standard or limitation issued or approved under Sections 301(b) (2) (C) and (D), 304(b) (2), and 307(a) (2) of the Clean Water Act, if the effluent standard or limitation so issued or approved:
 - (1) contains different conditions or is otherwise more stringent than any effluent limitation in the permit; or
 - (2) controls any pollutant not limited in the permit.
 - (b) Incorporate new or modified effluent limitations or other conditions, if the result of a waste load allocation study, toxicity test or other information indicates changes are necessary to assure compliance with Missouri's Water Quality Standards.
 - (c) Incorporate new or modified effluent limitations or other conditions if, as the result of a watershed analysis, a Total Maximum Daily Load (TMDL) limitation is developed for the receiving waters which are currently included in Missouri's list of waters of the state not fully achieving the state's water quality standards, also called the 303(d) list.
- The permit as modified or reissued under this paragraph shall also contain any other requirements of the Clean Water Act then applicable.



Missouri Department of Natural Resources
Water Protection Program
Water Pollution Control Branch
NPDES Permits & Engineering Section

Water Quality Review Sheet
Determination of Effluent Limits

Facility Information

FACILITY NAME: Crestview Mobile Home Park NPDES #: MO-0130575

FACILITY TYPE/DESCRIPTION: Mobile Home Park/Extended Aeration Package Plant

ECOREGION: Central Irregular Plains 8-DIGIT HUC: 07110004 COUNTY: Lincoln
Central Irregular Plains Osage Plains
Mississippi Alluvial Plains Ozark Highlands

LEGAL DESCRIPTION: NE¼ NW¼ NW¼ Sec.35 T49N R2E LATITUDE/LONGITUDE: +039 02 50/-090 45 02

WATER QUALITY HISTORY: No water quality data available on receiving stream. Sandy Creek is closest classified stream. Stream is considered to be gaining per MDNR Geohydrologic Evaluation #02103.

Outfall Characteristics

OUTFALL	DESIGN FLOW (CFS)	TREATMENT TYPE	RECEIVING WATERBODY	OTHER
001	1.56	Extended Aeration	Unnamed Tributary to Barley Branch	

Receiving Waterbody Information

WATERBODY	CLASS	7Q10 (CFS)	*DESIGNATED USES	OTHER CHARACTERISTICS
Barley Branch	U	0	None	1.1 mi. to Class C
Sandy Creek	C	0	LWW, AQL	WBID: 0029

*Cool Water Fishery (CLF), Cold Water Fishery (CDF), Irrigation (IRR), Industrial (IND), Boating & Canoeing (BTG), Drinking Water Supply (DWS), Whole Body Contact Recreation (WBC), Protection of Warmwater Aquatic Life and Human Health (AQL), Livestock & Wildlife Watering (LWW)

COMMENTS: There are 2 small ponds downstream from the outfall. Parameters of concern are BOD₅, TSS, pH, and ammonia.

Permit Limits and Information

TMDL WATERSHED: ☐ N W.L.A. STUDY ☐ N DISINFECTION REQUIRED: ☐ N DISINFECTION WAIVER: ☐ N
(Y OR N) CONDUCTED: (Y OR N) (Y, N, NA)

OUTFALL# 001

WET TEST (Y OR N): ☐ N FREQUENCY: _____ A.E.C. _____ LIMIT: _____

OUTFALL# 001 CONT'D.

PARAMETER	DAILY MAXIMUM	WEEKLY AVERAGE	MONTHLY AVERAGE	MONITORING FREQUENCY	SAMPLE TYPE
BOD ₅		45 mg/L	30 mg/L	quarterly	24 HR. COMP.
TSS		45 mg/L	30 mg/L	QUARTERLY	24 HR. COMP
PH	6-9			QUARTERLY	GRAB
AMMONIA AS N (MAY-OCT)	19.1 mg/L		9.5 mg/L	QUARTERLY	GRAB
AMMONIA AS N (NOV-APR)	22.4 mg/L		11.2 mg/L	QUARTERLY	GRAB
FLOW (GALLONS/DAY)				QUARTERLY	24 HR. TOTAL

Please report the date, time, and location for each parameter sampled along with the average daily flow (actual flow measured or estimated, not design flow). All the parameters should be sampled on the same day and within no more than a 2-hour period. If dissolved oxygen (DO) is to be sampled, sampling should take place at dawn. If discharge is contingent to storm events, rainfall should be measured every time there is a discharge.

Derivation and Discussion of Limits

Water quality based maximum daily and average monthly effluent limitations were calculated using methods and procedures outlined in USEPA's "Technical Support Document for Water Quality-based Toxics Control" (EPA/505/2-90-001).

Ammonia as Nitrogen. Ammonia limits were calculated using values of zero for upstream ammonia concentration and upstream flow. General warm water fishery ammonia criteria apply (10CSR 20-7.031, Table B).

Season	Temp °C	pH	Total ammonia CCC mg/L	Total ammonia CMC mg/L
Summer	26	7.8	1.2	14.0
Winter	6	7.8	2.1	16.4

Summer (pH=7.8, T=26°C.)

$$\text{CMC} = 14.0 \text{ mg/L} \div 1.2 = 11.67 \text{ mg/L Ammonia as Nitrogen}$$

$$\text{LTA}_c = 0.527 * 11.67 \text{ mg/L} = 6.15 \text{ mg/L} \quad [\text{CV} = 0.6, 99^{\text{th}} \text{ Percentile}]$$

$$\text{MDL} = 6.15 \text{ mg/L} * 3.11 = \mathbf{19.1 \text{ mg/L}} \quad [\text{CV} = 0.6, 99^{\text{th}} \text{ Percentile}]$$

$$\text{AML} = 6.15 \text{ mg/L} * 1.55 = \mathbf{9.5 \text{ mg/L}} \quad [\text{CV} = 0.6, 95^{\text{th}} \text{ Percentile, } n = 4]$$

Winter (pH = 7.8, T = 6°C.)

$$\text{CMC} = 16.4 \text{ mg/L} \div 1.2 = 13.67 \text{ mg/L Ammonia as Nitrogen}$$

$$\text{LTA}_c = 13.67 \text{ mg/L} * 0.527 = 7.20 \text{ mg/L} \quad [\text{CV} = 0.6, 99^{\text{th}} \text{ Percentile}]$$

$$\text{MDL} = 7.20 \text{ mg/L} * 3.11 = \mathbf{22.4 \text{ mg/L}} \quad [\text{CV} = 0.6, 99^{\text{th}} \text{ Percentile}]$$

$$\text{AML} = 7.20 \text{ mg/L} * 1.55 = \mathbf{11.2 \text{ mg/L}} \quad [\text{CV} = 0.6, 95^{\text{th}} \text{ Percentile, } n = 4]$$

Reviewer: Alan Moreau

Date: June 29, 2004

Unit Chief: Richard Laux

Monitoring and effluent limits contained within this document have been developed in accordance with EPA guidelines using the best available data and are believed to be consistent with Missouri's Water Quality Standards and Effluent Regulations. If additional water quality data or anecdotal information are available that may affect the recommended monitoring and effluent limits, please forward these data and information to the author.